PATENT
Atty. Dkt. AMAT/5730/TCG/WCVD



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Yoo, et al.

Serial No.: 10/023,125

Confirmation No.: 4585

Filed:

December 17, 2001

For:

Pulse Nucleation Enhanced Nucleation Technique for

Improved Step Coverage and Better GAP Fill for

WCVD Process

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Group Art Unit: 1765

Examiner:

Unknown

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Alexandria, VA 22313-1450

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Date

Signature

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The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

While the information submitted in this Supplemental Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

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The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

If the sum of \$180.00 is due under 37 CFR § 1.17(p) pursuant to § 1.97, the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/AMAT/5730/KMT.

Respectfully submitted,

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Substitute for form 1449A/PTO	•, •,	Application Number	10/023,125
	SEP 2 0 2004	Filing Date	December 17, 2001
SUPPLEMENTAL INFO	MATION /	First Named Inventor	Yoo, et al.
DISCLOSURE STATE	WENT BY	Group Art Unit	1765
APPLICANT		Examiner Name	Unknown

Attorney Docket Number

Submission Date

(Use as many sheets as necessary)

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Examiner

AMAT/5730/TCG/WCVD

September 15, 2004

U.S. PATENT DOCUMENTS						
Examiner Cite No.1	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where	
	Number-Kind Code ^{2 (f known)}	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear		
	A1	6,635,965	10/21/2003	Lee, et al.		
	A2					
	А3					
	A4					
	A5					
	A6				RECEIVED	
	A7					
	A8				SEP 2 3 2064	
	A9				TC 1700	
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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²	
	C1	Yang, et al. "Atomic Layer Deposition of Tungsten Film from WF6/B2H6: Nucleation Layer for Advanced Semiconductor Device," Conference Proceedings ULSI XVII (2002) Materials Research Society.		

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.